AMENDMENTS TO THE CLAIMS:

Please amend the claims as follows:

1. - 24. (Canceled).

25. (Previously Presented) An apparatus for implementing a high-availability computer system architecture, comprising:

a physical pipe for transferring data between an active computer system and a standby computer system;

a first logical pipe for transferring data over the physical pipe, the data comprising operational status information allowing a one of the active computer system and the standby computer system to determine a status of another one of the active computer system and the standby computer system; and

a second logical pipe for transferring high-availability data over the physical pipe.

26. (Previously Presented) The apparatus in accordance with Claim 25 wherein the data transferred between the active computer system and the standby computer system on the first logical pipe comprises checkpointing data.

27. (Previously Presented) The apparatus in accordance with Claim 25 wherein the high-availability data transferred between the active computer system and the standby computer system on the second logical pipe comprises total system state data of the active computer system.

28. (Previously Presented) The apparatus in accordance with Claim 25 wherein the second logical pipe uses remote direct memory access write operations for transferring high-availability data.

29. (Previously Presented) The apparatus in accordance with Claim 25 wherein the second logical pipe uses remote direct memory access read operations for transferring high-availability data.

30. (Currently Amended) An apparatus for implementing a high-availability computer system architecture, comprising:

a physical pipe for transferring data between an active computer system and a standby computer system; and

a network interface card implementing a first logical pipe for transferring data over the physical pipe and a second logical pipe for transferring ~~data and~~ high-availability information over the physical pipe, the data comprising operational status information allowing a one of the active computer system and the standby computer system to determine a status of another one of the active computer system and the standby computer system.

31. (Previously Presented) The apparatus in accordance with Claim 30 wherein the high-availability information transferred between the active computer system and the standby computer system on the network interface card comprises total system state data of the active computer system.

32. (Previously Presented) The apparatus in accordance with Claim 30 wherein the network interface card uses remote direct memory access write operations for transferring high-availability data.

33. (Previously Presented) The apparatus in accordance with Claim 30 wherein the network interface card uses remote direct memory access read operations for transferring high-availability data.

34. (Currently Amended) A system for implementing a high-availability computer system architecture, comprising:

a physical pipe;

an active computer system having a network interface card for transferring data and high-availability information over a first logical pipe and a second logical pipe, respectively, of the physical pipe, the data comprising operational status information allowing [the] a standby computer system to determine status of the active computer system; and

[a] the standby computer system having an interface card for receiving the high-availability information from the second logical pipe of the physical pipe.

35. (Previously Presented) A system for implementing a high-availability computer system architecture, comprising:

physical means for transferring data between an active computer system and a standby computer system;

a first logical means for transferring data over the physical means, the data comprising operational status information allowing a one of the active computer system and the standby

computer system to determine a status of another one of the active computer system and the standby computer system; and

a second logical means for transferring high-availability data over the physical means.

36. (Previously Presented) The system in accordance with Claim 35 wherein the data transferred between the active computer system and the standby computer system on the first logical means comprises checkpointing data.

37. (Previously Presented) The system in accordance with Claim 35 wherein the high-availability data transferred between the active computer system and the standby computer system on the second logical means comprises total system state data of the active computer system.

38. (Previously Presented) The system in accordance with Claim 35 wherein the second logical means uses at least a one of a remote direct memory access read operation and a remote direct memory access write operation for transferring high-availability data.

39. (Previously Presented) An apparatus for implementing a high-availability computer system architecture, comprising:

a physical pipe for transferring data between an active computer system and a standby computer system;

a first logical pipe for transferring operational status information over the physical pipe; and

a second logical pipe for transferring total system state data over the physical pipe.

40. (Previously Presented) The apparatus in accordance with Claim 39 wherein the second logical pipe uses remote direct memory access write operations for transferring total system state data over the physical pipe.

41. (Previously Presented) The apparatus in accordance with Claim 39 wherein the second logical pipe uses remote direct memory access read operations for transferring total system state data over the physical pipe.

42. (Previously Presented) A method in a high-availability computer system having an active computer system and a standby computer system, the method comprising:

sending a message to the standby computer system to enter a switch-over state;

monitoring a transfer complete marker;

transferring total system state from the active computer system to the standby computer system; and

switching from the active computer system to the standby computer system upon detecting the transfer complete marker.

43. (Previously Presented) The method in accordance with Claim 42 wherein the transferring total system state from the active computer system to the standby computer system, further comprises:

performing at least a one of a remote direct memory access read operation and a remote direct memory access write operation.

44. (Previously Presented) A computer-readable medium containing instructions for performing a method in a high-availability computer system having an active computer system and a standby computer system, the method comprising:

sending a message to the standby computer system to enter a switch-over state;

monitoring a transfer complete marker;

transferring total system state from the active computer system to the standby computer system; and

switching from the active computer system to the standby computer system upon detecting the transfer complete marker.

45. (Previously Presented) The computer-readable medium in accordance with Claim 44 wherein the transferring total system state from the active computer system to the standby computer system, further comprises:

performing at least a one of a remote direct memory access read operation and a remote direct memory write operation.